In the claims:

Please enter the following amendments:

1. **(Currently Amended)** A nucleic acid present in other than its natural environment, wherein said nucleic acid encodes a chromo- or fluorescent protein and is from a non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species**, wherein said protein has a sequence identity of at least about 70% with SEQ ID NO:12**.

2. **(Currently Amended)** The nucleic acid according to Claim 1, wherein said non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species is an ***Anthozoan*** ~~Anthozoan~~ species.

3. **(Original)** The nucleic acid according to Claim 1, wherein said nucleic acid is isolated.

4. **(Currently Amended)** A nucleic acid present in other than its natural environment, wherein said nucleic acid encodes an ***Anthozoan*** ~~Anthozoan~~ chromo- or fluorescent protein and is from a **non-*Pennatulacean Anthozoan*** ~~non-Pennatulacean Anthozoan~~ species**, wherein said protein has a sequence identity of at least about 70% with SEQ ID NO:12**.

5. **(Original)** The nucleic acid according to Claim 4, wherein said nucleic acid is isolated.

6. **(Currently Amended)** A nucleic acid ~~having a sequence of residues that is substantially the same as or identical to a nucleotide sequence of at least 10 residues in length of SEQ ID No:11~~ **present in other than its natural environment, wherein said nucleic acid encodes a chromo- or fluorescent protein and is from a non-bioluminescent *Cnidarian* species, wherein said protein has a sequence identity of at least about 75% with SEQ ID NO:12**.

7. **(Currently Amended)** The nucleic acid according to Claim 6, wherein said ~~nucleic acid~~ **protein** has a sequence **identity** ~~similarity~~ of at least about **80% with SEQ ID NO:12** ~~60% with a sequence of at least 10 residues in length of SEQ ID No:11~~.

8. **(Currently Amended)** A nucleic acid present in other than its natural environment that encodes a chromo and/or fluorescent protein, wherein said protein is either:

(a) from a non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species; or

(b) from a ***non-Pennatulacean Anthozoan*** ~~non-Pennatulacean Anthozoan~~ species; and

wherein said protein has a sequence identity of at least about 80% with SEQ ID NO:12.

9. **(Currently Amended)** The nucleic acid according to Claim 8, wherein said non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species is an ***Anthozoan*** ~~Anthozoan~~ species.

10. **(Original)** The nucleic acid according to Claim 9, wherein said nucleic acid is isolated.

11. **(Currently Amended)** The nucleic acid according to Claim 9, wherein said protein has an amino acid sequence of ~~SEQ ID No: 12~~ **SEQ ID NO:12**.

12. **(Currently Amended)** A nucleic acid **present in other than its natural environment** that encodes ~~a mutant protein of~~ a chromo and/or fluorescent protein that is either:

(a) from a non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species; or

(b) from a ***non-Pennatulacean Anthozoan*** ~~non-Pennatulacean Anthozoan~~ species; and

wherein said protein has a sequence identity of at least about 85% with SEQ ID NO:12.

13. **(Currently Amended)** The nucleic acid according to Claim 12, wherein said non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species is an ***Anthozoan*** ~~Anthozoan~~ species.

14. **(Original)** The nucleic acid according to Claim 12, wherein said mutant protein comprises at least one point mutation as compared to its wild type protein.

15. **(Original)** The nucleic acid according to Claim 12, wherein said mutant protein comprises at least one deletion mutation as compared to its wild type protein.

Claims 16-17 **(Canceled)**

18. **(Currently Amended)** **A** ~~An isolated~~ nucleic acid **present in other than its natural environment** ~~or mimetic thereof that hybridizes under stringent conditions to a nucleic acid selected from the group consisting of:~~

~~(a) a nucleic acid encoding a chromo- or fluorescent protein from a non-bioluminescent Cnidarian species;~~

~~(b) a nucleic acid encoding an Anthozoan chromo- or fluorescent protein from a non-Pennatulacean Anthozoan species;~~

~~(c) a nucleic acid having a sequence of residues that is substantially the same as or identical to a nucleotide sequence of at least 10 residues in length of SEQ ID No:11;~~

~~(d) a nucleic acid~~ that encodes a ~~mutant protein of an Anthozoan~~ chromo and/or fluorescent protein that is either:

(i) from a non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species; or

(ii) from a **non-*Pennatulacean Anthozoan*** ~~non-Pennatulacean Anthozoan~~ species; ~~and~~

wherein said protein has a sequence identity of at least about 70% with SEQ ID NO:12, and wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.

~~(e) fragments of the above sequences;~~

~~or its complementary sequence.~~

19. (**Currently Amended**) The nucleic acid according to Claim 18, wherein said non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species is an ***Anthozoan*** ~~Anthozoan~~ species.

20. (**Currently Amended**) A construct comprising a vector and a nucleic acid ~~selected from the group consisting of:~~

~~(a) a nucleic acid encoding a chromo- or fluorescent protein from a non-bioluminescent Cnidarian species;~~

~~(b) a nucleic acid encoding an Anthozoan chromo- or fluorescent protein from a non-Pennatulacean Anthozoan species;~~

~~(c) a nucleic acid having a sequence of residues that is substantially the same as or identical to a nucleotide sequence of at least 10 residues in length of SEQ ID No:11;~~

~~(d) a nucleic acid~~ that encodes a ~~mutant protein of a~~ chromo and/or fluorescent protein that is either:

(i) from a non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species; or

(ii) from a **non-*Pennatulacean Anthozoan*** ~~non-Pennatulacean Anthozoan~~ species; **and**

wherein said protein has a sequence identity of at least about 70% with SEQ ID NO:12.

~~(e) a fragment of the above nucleic acids; and~~

~~(f) a nucleic acid or the complement thereof that hybridizes under stringent conditions to the above nucleic acids.~~

21. (**Currently Amended**) The construct according to Claim 20, wherein said non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species is an ***Anthozoan*** ~~Anthozoan~~ species.

22. (**Previously Presented**) An expression cassette comprising:

(a) a transcriptional initiation region functional in an expression host;

(b) a nucleic acid selected from the group consisting of the nucleic acids according to Claim 1; and

(c) a transcriptional termination region functional in said expression host.

23. **(Original)** A cell, or the progeny thereof, comprising an expression cassette according to Claim 22 as part of an extrachromosomal element or integrated into the genome of a host cell as a result of introduction of said expression cassette into said host cell.

Claims 24-26 **(Canceled)**

27. **(Previously Presented)** A transgenic cell or the progeny thereof comprising a transgene selected from the group consisting of a nucleic acids according to Claim 1.

Claims 28-30 **(Canceled)**

31. **(Currently Amended)** A kit comprising ~~a nucleic acid~~ **the nucleic acid** according to Claim 1 and instructions for using said nucleic acid.

32. **(Currently Amended)** A nucleic acid present in other than its natural environment, wherein said nucleic acid encodes a chromo- or fluorescent protein from a non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species, wherein said **protein** ~~nucleic acid~~ has a sequence **identity** ~~similarity~~ of at least about **80% with SEQ ID NO:12** ~~40% with SEQ ID NO:11~~.

33. **(Previously Presented)** The nucleic acid according to Claim 32, wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.

34. **(Previously Presented)** The nucleic acid according to Claim 32, wherein said protein has an absorbance maximum ranging from about 350 to 650 nm.

35. **(Previously Presented)** The nucleic acid according to Claim 32, wherein said protein has an absorbance maximum ranging from about 400 to 600 nm.

36. (**Currently Amended**) The nucleic acid according to ~~Claims~~ **Claim** 32, wherein said protein has an excitation spectrum ranging from about 300 to 700 nm and an emission spectrum ranging from about 400 to 800 nm.

37. (**Previously Presented**) The nucleic acid according to Claim 32, wherein said protein has an excitation spectrum ranging from about 350 to 650 nm and an emission spectrum ranging from about 425 to 775 nm.

38. (**Previously Presented**) The nucleic acid according to Claim 32, wherein said protein has an excitation spectrum ranging from about 400 to 600 nm and an emission spectrum ranging from about 450 to 750 nm.

39. (**Previously Presented**) The nucleic acid according to claim 32, wherein said protein has an amino acid sequence of SEQ ID NO:12.

40. (**Currently Amended**) A nucleic acid present in other than its natural environment, wherein said nucleic acid encodes a chromo- or fluorescent protein from a non-bioluminescent ~~Cnidarian~~ ***Cnidarian*** species, wherein said protein has a sequence **identity** ~~similarity~~ of at least about **85%** ~~40%~~ with SEQ ID NO:12.

41. (**Previously Presented**) The nucleic acid according to Claim 39, wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.

42. (**Previously Presented**) The nucleic acid according to Claim 39, wherein said protein has an absorbance maximum ranging from about 350 to 650 nm.

43. (**Previously Presented**) The nucleic acid according to Claim 39, wherein said protein has an absorbance maximum ranging from about 400 to 600 nm.

44. **(Currently Amended)** The nucleic acid according to ~~Claims~~ **Claim** 39, wherein said protein has an excitation spectrum ranging from about 300 to 700 nm and an emission spectrum ranging from about 400 to 800 nm.

45. **(Previously Presented)** The nucleic acid according to Claim 39, wherein said protein has an excitation spectrum ranging from about 350 to 650 nm and an emission spectrum ranging from about 425 to 775 nm.

46. **(Previously Presented)** The nucleic acid according to Claim 39, wherein said protein has an excitation spectrum ranging from about 400 to 600 nm and an emission spectrum ranging from about 450 to 750 nm.

47. **(Currently Amended)** The nucleic acid according to claim 32, wherein said **protein** ~~nucleic acid~~ has **an amino acid** ~~nucleotide~~ sequence of SEQ ID NO:12.

Please add the following new claims:

48. **(New)** The nucleic acid according to Claim 1, wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.

49. **(New)** The nucleic acid according to Claim 1, wherein said protein has an excitation spectrum ranging from about 300 to 700 nm and an emission spectrum ranging from about 400 to 800 nm.

50. **(New)** The nucleic acid according to Claim 4, wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.

51. **(New)** The nucleic acid according to Claim 4, wherein said protein has an excitation spectrum ranging from about 300 to 700 nm and an emission spectrum ranging from about 400 to 800 nm.

52. **(New)** The nucleic acid according to Claim 6, wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.